

TAD A1000

Trickled down from TAD's existing Class D power amplifiers and partnering preamp, the A1000 is the first integrated model designed to complement its storied Evolution series
 Review: **Andrew Everard** Lab: **Paul Miller**

Flying in the face of received hi-fi wisdom that presumes absolute sonic purity is best achieved with separate pre/power amplifiers, integrated amplifiers are having something of a renaissance. Aside from the entry-level and mid-market, where one-box amplification has always been the go-to choice, there's now a good selection of high-end models from the likes of Rotel's Michi X3 S2 [HFN Jan '24], starting from just under £6000, to the massive Dan D'Agostino Momentum MxV [also HFN Jan '24], yours for just short of £100k when fully loaded with DAC and phono modules.

PIONEER SPIRIT

Stepping into this arena we have the latest arrival from TAD, the £27,995 A1000, an all-analogue heavyweight delivering a claimed 250W/4ohm a side from its Class D power amplification [see PM's Lab Report, p47]. This is a straightforward design, from its input provision – four balanced line ins on XLRs, and two unbalanced on RCAs – to its fascia styling, which has just a narrow black strip and a prominent volume control dividing an all-silver aluminium cliff-face. Well, all-silver is the version we have here, which is technically the A1000-S. As an alternative, and on a built-to-order basis, there's also the A1000-K, the suffix standing for 'kuro', Japanese for black.

Yes, Japanese, and yes, *that* TAD, which some with long memories will recall was started as an offshoot of Pioneer [see PM's interview sidebar p45], focused on making high-end loudspeakers. Technical Audio Devices was the full name when it began back in 1975, and the move was logical, given that Nozomu Matsumoto had founded Pioneer in 1937 as a speaker company. Starting as a driver manufacturer, and gaining a following in the pro audio market, TAD has now been making

complete speakers for consumers for the better part of a quarter of a century.

Not that moving beyond speakers is anything new for the company. In 2007 it renamed itself Technical Audio Devices Laboratories, Inc., and has been making amplification and digital products ever since, based on some of the technologies from Pioneer's – mainly Japan-only – high-end models. Our late colleague, John Bamford, reviewed the D600/C2000/M2500 disc player/DAC, preamp and power amp, then making their European debut, some 14 years ago [HFN May '12].

Wind forward to the present day, and the TAD A1000 clearly draws on the design of those components, sitting as it does in the company's Evolution lineup, one rung below the Reference series. This range also offers a disc player, a DAC, a preamp and power amplification, plus a

choice of partnering loudspeakers, but the A1000 remains the only integrated in the company's entire catalogue.

HIDE AND SEEK

Anyway, what we have here is an amplifier so simple that its main complexity is found in the remote handset [p47], a 'universal' control designed for a complete system including home cinema add-ons. Aside from that vestigial display in the black band cutting a line across the fascia, the only controls here are the large rotary set above, with smooth ball-bearing operation to guide a resistor-ladder volume circuit, and some small buttons all but hidden by their black-on-black design.

These allow the user to cycle through the inputs, switch the volume from single to half-steps for fine adjustment, switch the display off, and enter the menu, when two

'The Class D power amp is configured as bridge-tied load'



RIGHT: Single-stage current-feedback preamp [left] is fed from a separately regulated supply off the main twin-transformer/4x33,000µF PSU [right and centre]. The Class D output stage is under the top input switching/preamp PCB



'The all-up 29kg fighting weight would have been far higher if this were a traditional Class AB amp'

INTEGRATED AMPLIFIER



LEFT: Resistor-ladder volume and input are shown on a yellow display with input buttons, fine (volume) and mute to the left and display (brightness) and limited 'menu' options to the right

further buttons allow for scrolling. The menu is limited: you'll find no more than balance, input trim (-10 to +20dB), and an ECO mode allowing a 20-minute standby switching. This is set 'on' by default in EU models, and 'off' for those destined for the 'drill baby drill and back to V8s' US market.

TOP AND BOTTOM

The A1000's rear panel is similarly no-nonsense. Inputs are ranged across the top, and chunky terminals for a single pair of speakers sit below, reflecting an internal layout in which the preamp section sits above the in-house-designed Class D power amplification, the latter configured as bridge-tied load (BTL). Going its own way with this power amp technology has long been a TAD trait [see PM's boxout, p46], and it has stuck with it despite the more recent arrival of high-quality Class D amp modules from third-party suppliers.

Power is from two substantial toroidal transformers and four large 33,000µF smoothing caps, all proprietary designs. There's nothing tricky here – just logical, symmetrical layouts and no-nonsense engineering with the PSU, control circuit, single-stage current-feedback preamp and power amp all physically separated in distinct chambers within the braced alloy chassis. It looks and feels massive, though the all-up 29kg fighting weight would probably have been far higher if this were a traditional Class AB amplifier.

The A1000's FET preamp section is leveraged from TAD's Reference series preamps while the cool-running Class D power amp stage removes the need for conventional heatsinking, keeping the industrial design clean. Underneath, the amp sits on three isolating feet with internal inverted spikes, protecting your surfaces. Two other feet, slightly shorter, sit at the back to ensure the A1000 will not tip should you lean on a rear corner while plugging/unplugging cables. Its engineers are nothing if not thoughtful!

GENTLE GIANT

If the design of the A1000 is clean and simple, so is the sound – a classic amplifier

style that's slightly warm and sweet at low levels, opening up and gaining more impact as volume levels are raised. Used between the dCS Varèse streamer/DAC [HFN Feb '25] and Wilson Audio's Alexx Vfx floorstanding speakers

in the HFN Reference Listening Room [p41 & HFN Yearbook '25], the TAD A1000 was by no means outclassed by either, delivering a clear view of the qualities of the digital front-end while driving the speakers with grip and conviction.

The abundance of power is obvious in highly dynamic music, and not just tracks with thump and punch. This is a gentle giant of an amplifier, as made clear with Vaughan Williams' evocative 'In The Fen Country' [Haitink/London Philharmonic; Warner Classics 5567622]. There was fine detailing here, and a sound sweeter and more fluid than aggressively in your

JÜRGEN TIMM

'TAD is still 100% part of the Pioneer Corporation', says Jürgen Timm, now the Germany-based 'Consultant to CEO', Shinji Tarutani, and Chairman of the Board of the High End Society (organisers of the High End Show, now in Vienna for 2026). But TAD has clearly sheltered through a long storm – Pioneer sold its plasma TV technology to Panasonic in 2010 which is when Jürgen (a Pioneer employee from 1988) transitioned to TAD in Japan as its Marketing Director for Europe.

From 2015-18 Pioneer was merged with Onkyo and its distribution split between Aquipa in the EU and Voxx in the US. Onkyo retained the rights to the TEAC and Esoteric brands, while TAD remained separate, 'assigned to Pioneer's car audio division in Japan', reveals Jürgen. At 2025's end, Pioneer announced a shareholder transition, selling the Corp. to CarUX Holding Limited (a daughter company of Taiwan-based InnoLux, a major OEM display manufacturer).

TAD is now an independent company under the Pioneer Corp. umbrella, with additional facilities for R&D and production in Kawagoe, about an hour northwest of Tokyo. Its speakers are made in Tendo, further north in the Yamagata prefecture. 'A new generation of engineers has recently joined the TAD brand', says Jürgen, 'but the "old guard" of the last quarter century remain to pass on their experience'.

Stability means new products: 'At the upcoming High End in Vienna TAD will have a new "entry-level" standmount on display'. PM





INTEGRATED AMPLIFIER

LAB REPORT

TAD A1000

Although TAD's M2500 power amplifier [*HFN* Feb '10] – the launch platform for its Class D architecture – is a more powerful design, into 8ohm at least, its technical 'fingerprint' is clear to see in the performance of this new A1000 integrated model. Distortion, for example, remains very low indeed at 0.0003% from 20Hz-800Hz and is <0.002% through the midrange up to about 40W/8ohm, increasing to just 0.01% at 150W/8ohm. In both the M2500 and A1000, distortion rises at higher frequencies [see Graph 2, below] as does the output impedance, both a function of the reactive output filter and the latter being the cause of response variations when loaded by a 'real' loudspeaker [see boxout, p46]. So, distortion increases from just 0.0015%/1kHz to 0.021%/20kHz (re. 10W/8ohm) before rising to 0.28%/20kHz at 100W/8ohm. Gain is a generous +41.6dB but noise, as we saw in the M2500, is 10-20dB higher than we'd expect from a contemporary Class AB or Hypex/Purifi Class D amplifier, realising a 75dB A-wtd S/N ratio here (re. 0dBW).

So what about power? TAD rates the A1000 at 250W/4ohm and, in practice, it achieves 2x185W/8ohm and 2x310/4ohm with – unusually for a Class D amp – an increase under dynamic conditions to 240W, 422W and 787W into 8, 4 and 2ohm loads, respectively [see Graph 1, below]. Note that while distortion also increases more markedly into lower impedances, into the lowest 1ohm loads the A1000 is protected at 763W (27.6A), making this integrated more tolerant of very difficult loudspeaker loads than the M2500, which cuts off at 435W/1ohm (20.8A). This being a Class D design, the A1000 also achieves a full 85% efficiency when servicing a 2x150W/8ohm output. PM



ABOVE: Analogue only – TAD's A1000 offers four balanced (XLR) and two single-ended (RCA) line inputs above a single pair of substantial 4mm speaker cable binding posts. Output is fully protected

Wormslayer album [Strange F.O.L.K Records; STRANGCD8]. Boy, this mix is dense, but TAD's amp just kept on punching through in unstoppable style, even when running hard into the Wilson Audio speakers. This isn't the world's best-sounding album, but its semi-psychedelic oddness was handled deftly by the A1000.

SKETCH SHOW

On the subject of 'odd', the unusual instrumentation and atonality of Moldavian violinist Patricia Kopatchinskaja's recording of Márton Illés' 'Sketches For Solo Violin And Live Electronics' [*Bowed Spaces*; Alpha ALPHA1221], would challenge any system – and probably more than a few listeners. Yet TAD's integrated amplifier opened up the recording to deliver a compelling, otherworldly soundscape, at once intriguing and unsettling. The solo violin

LEFT: TAD's CXF4096 full system remote offers control over standby, volume, mute, input selection and display brightness



was tightly defined amidst all the swirling electronica of the *SWR Experimentalstudio des Freiburg*.

With those last two recordings, I began to get the feeling I was playing chicken with the A1000, trying to find music to unsettle it, and lose its way due to that underlying warmth. Having failed to do so, I fell back on something altogether more refined and glorious. Having just seen the excellent film *The Choral*, written by Alan Bennett and directed by Nicholas Hytner, I settled for the recently released version of Elgar's *The Dream Of Gerontius* by the Huddersfield Choral Society and the Opera North orchestra.

Timed to coincide with the film, this Hyperion set [CDA68461/2] mixes drama with warmth and lushness. The TAD A1000's easy-going but rewarding presentation did an excellent job of taking me straight to the heart of the piece, sounding grand and impressive while still delivering fine insight into both playing and singing. ♪

HI-FI NEWS VERDICT

While perhaps not sating the appetite of the 'red in tooth and claw' brigade, keen to have every last iota of a recording hurled at them, the A1000 remains a remarkably well-judged 'big integrated'. Combining the power to drive very serious speakers with a magnificently listenable and informative sound – missing only the hi-fi histrionics – the listener is left free to immerse themselves in the music.

Sound Quality: 86%
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face. That's just right for this dramatic but essentially pastoral music, written by the composer recalling his cycling trips while a student at Cambridge. TAD's amp also had plenty in reserve for VW's occasionally over-exuberant dramatisation in this account of the flat, bleak landscape, and the sense of open soundstaging was excellent.

With the more overt drama of Wagner's *Tannhäuser* overture [Georg Solti/Vienna Philharmonic; Decca 4832507], the signature Wagnerian brass had just the right combination of power and 'blare', rising above the tight chords being played by the rest of the orchestra. True, there was not as much bite as some more forward-sounding amps, but there was no shortage of warmth as the A1000 drove the speakers to magnificent effect.

'This set would challenge any system, and most listeners'

The joyous Walton 'Portsmouth Point' overture from the recent Warner Classics *Bravo!* release celebrating Sir Adrian Boult [2685460381] saw the A1000 rendering the orchestra with speed and attack, particularly in the percussion. The prog

rock of 'Nous Sommes Du Soleil', from Yes's remastered *Tales From Topographic Oceans* album [Rhino R2 728280], offered something completely different – a grandiose production, with all that noodling on guitars and keyboards underpinned by chunky bass and drums. Yet TAD's amplifier proved equally at home here, fast and insightful, and able to go seriously loud

ABOVE: The faceted alloy chassis sits on three feet with internally inverted spikes. The large volume control rotates on high-precision ball bearings and is mounted symmetrically between the dual-mono L/R circuits within

while keeping everything under control for those most intense of moments.

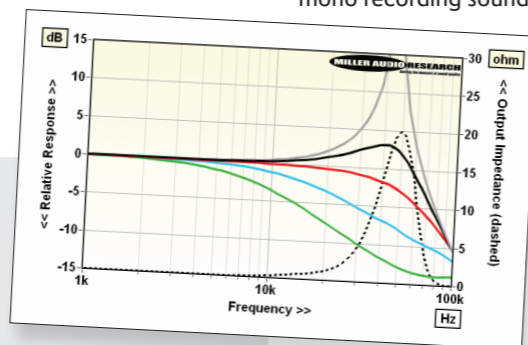
CHARACTER BUILDING

Dialling things back with the Chet Baker Quintet's *Coming On With...* [Craft Recordings, 192kHz/24-bit download], and 'No Fair Lady' had a lovely easy swing, the flugelhorn and trumpet soloing up above the piano, drums and bass, all of which were superbly resolved. This 1967 mono recording sounded as fresh as the proverbial daisy.

This amp can power along, sounding gutsy with the version of 'When Love Comes To Town' from Joe Bonamassa's *B.B. King's Blues Summit 100* [Keeping The Blues Alive Records, via

Qobuz]. The guitar clanged and howled, and the rhythm section hit home in infectious style. But then it was just as captivating with Eric Bibb's stripped-down 'Crossroads Marilyn Monroe', from his atmospheric *One Mississippi* album [Repute Records RRLP001]. As with the Bonamassa set, the blues guitar was fabulously characterful, with each note having good leading-edge attack and a luxurious decay.

The A1000 was punchy and attention-grabbing even with Kula Shaker's 'Charge Of The Light Brigade', from the recent



SPEAKER SYNERGY

TAD is not alone in using bridged, single-ended Class D modules to double the available output voltage [*HFN* Aug '17] but it was an 'early adopter' of this technology, having already launched its custom Class D solution in the M1000 and M2500 [*HFN* Feb '10] power amplifiers. In common with those models, the A1000's inductive output filter network is not included in the modulator's local feedback loop, causing its output impedance [dashed trace, inset Graph] to rise from a uniform 0.04-0.05ohm through bass and midrange to 1.37ohm/20kHz and 20ohm/49kHz. While distortion is low [see Lab Report, opposite] this 'traditional' Class D architecture means the amplifier/speaker system response remains influenced by speaker load impedance. Typically, the treble falls away as the speaker load impedance drops [see inset Graph: no speaker load, grey trace; 8ohm, black; 4ohm red; 2ohm, blue; 1ohm, green]. Into these purely resistive loads, the response to 20kHz changes from +2dB/no load; +1.1dB/8ohm; -0.4dB/4ohm; -3.4dB/2ohm and -7.5dB/1ohm. Put simply, if the impedance trend of your speakers dips significantly in the treble then the A1000's sound may lack a little 'air' or bite, and if it rises, it may sound a little brighter or livelier. PM